

Amount Obligated by this Amendment: \$350,000
Total Intended Award Amount: \$350,000
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$350,000
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2347422	Y	[REDACTED]	University of Texas at Austin
2347423	N	[REDACTED]	Harvard College, President & Fellows of Harvard University

NSF CONTACT INFORMATION

Managing Grants

Official (Primary Contact)

Name: Wendy Simmons
Email: wsimmons@nsf.gov
Phone: (703) 292-2803

Awarding Official

Name: Willis Phan
Email: wiphan@nsf.gov

Managing Program Officer

Name: Ronald Douglas Joslin
Email: rjoslin@nsf.gov
Phone: (703) 292-7030

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	0.80
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$28,289
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$126,143
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	
C. Fringe Benefits	\$6,083
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	
D. Equipment	
	\$0

E. Travel	
Domestic	\$13,196
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$56,429
<i>Total Other Direct Costs (G)</i>	\$56,429
H. Total Direct Costs (A Through G)	\$230,140
I. Indirect Costs*	\$119,860
J. Total Direct and Indirect Costs (H + I)	\$350,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$350,000
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

The indirect cost rate(s) for this award is/are not available. These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2348924

Managing Division Abbreviation: DBI

Amendment Number: 000

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 02/23/2024

Amendment Number: 000

Proposal Number: 2348924

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 02/12/2024.

Funds provided for participant support may not be diverted by the awardee to other categories of expense without the prior written approval of the cognizant NSF Program Officer. Since participant support cost is not a normal account classification, the awardee organization must be able to separately identify participant support costs. It is highly recommended that separate accounts, sub-accounts, sub-task, or sub-ledgers be established to accumulate these costs. The awardee should have written policies and procedures to segregate participant support costs.

AWARD INFORMATION

Award Number (FAIN): 2348924

Award Instrument: Standard Grant

Award Date: 02/23/2024

Award Period of Performance: Start Date: 03/15/2024 End Date: 02/28/2027

Project Title: REU Site: Summer Research Program in Ecology at Harvard Forest

Managing Division Abbreviation: DBI

Research and Development Award: Yes

Funding Opportunity: NSF 23-601 Research Experiences for Undergraduates

Assistance Listing Number(s) and Name(s): 47.074 Biological Sciences (Predominant source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$504,194
Total Intended Award Amount: \$504,194
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$504,194
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED]	Email: [REDACTED]	Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE
co-Principal Investigator: [REDACTED]	Email: [REDACTED]	Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official (Primary Contact) Name: Termia M. Millard Email: tmillard@nsf.gov Phone: (703) 292-7074	Awarding Official Name: Vanessa L. Richardson Email: vrichar@nsf.gov	Managing Program Officer Name: Amanda Alice Simcox Email: asimcox@nsf.gov Phone: (703) 292-8165
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GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 01/30/2023, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 23-601 Research Experiences for Undergraduates.

BUDGET

A. Senior Personnel	
Senior Personnel Count	6.00
Senior Personnel Calendar Months	0.00

Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	3.00
Other Professionals Calendar Months	3.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$16,134
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$16,134
C. Fringe Benefits	
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$22,797
D. Equipment	
Domestic	\$7,500
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$231,000

Participant Support Costs Travel	\$48,300
Participant Support Costs Subsistence	\$140,250
Participant Support Costs Other	\$10,500
Total Number of Participants	30.00
<i>Total Participant Costs (F)</i>	\$430,050
G. Other Direct Costs	
Materials Supplies	\$3,000
Publication Costs	\$1,275
Consultant Services	\$6,000
Computer Services	\$0
Subawards	\$0
Other	\$3,300
<i>Total Other Direct Costs (G)</i>	\$13,575
H. Total Direct Costs (A Through G)	\$473,922
I. Indirect Costs*	\$30,272
J. Total Direct and Indirect Costs (H + I)	\$504,194
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$504,194
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Modified Total Direct Costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

PROPOSAL BUDGET			FOR NSF USE ONLY		
ORGANIZATION Harvard University	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR [REDACTED]	AWARD NO. 2321651	PROPOSAL NO.		DURATION (months) Proposed Granted
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			NSF Funded Person-months CAL ACAD SUM		Funds Requested by proposer
1.					\$
2.					
3.					
4.					
5.					
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)					
7. (1) TOTAL SENIOR PERSONNEL (1-6)	1.0	0.0	0.0		8,449
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.0	0.0	0.0		0
2. (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	2.4	0.0	0.0		6,544
3. (1) GRADUATE STUDENTS					4,850
4. (0) UNDERGRADUATE STUDENTS					0
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0
6. (0) OTHER					0
TOTAL SALARIES AND WAGES (A + B)					19,843
C. FRINGE BENIFITS (IF CHARGED AS DIRECT COSTS)					4,288
TOTAL SALARIES, WAGES AND FRINGE BENIFITS (A + B + C)					24,131
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5000.)					
1				\$	
2				\$	
3				\$	
Others: (see budget comment page ...)					
TOTAL EQUIPMENT					0
E. TRAVEL			1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)		2,098
			2. INTERNATIONAL		0
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS	\$				
2. TRAVEL					
3. SUBSISTENCE					
4. OTHER					
(0) TOTAL PARTICIPANT COSTS					0
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					2,098
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					0
3. CONSULTANT SERVICES					0
5. COMPUTER SERVICES					0
5. SUBAWARDS					0
6. OTHER					1,259
TOTAL OTHER DIRECT COSTS					3,357
H. TOTAL DIRECT COSTS (A THROUGH G)					29,586
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS (F&A)					20,414
J. TOTAL DIRECT AND INDIRECT COSTS (A THROUGH G)					50,000
K. FEE					
K1 RESIDUAL FUNDS					0
K2 FEE					0
L. AMOUNT OF THIS REQUEST(J) OR (J - K1 + K2)				\$	\$ 50,000
M. COST SHARING PROPOSED LEVEL \$ 0			AGREED LEVEL IF DIFFERENT \$		
PI/PD TYPED NAME & SIGNATURE*		DATE	FOR NSF USE ONLY		
			INDIRECT COST RATE VERIFICATION		
ORG. REP. TYPED NAME & SIGNATURE*		DATE	Date Checked	Date of Rate Sheet	Initials - ORG

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*SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

NATIONAL SCIENCE FOUNDATION

PROPOSAL BUDGET			FOR NSF USE ONLY		
ORGANIZATION Harvard University	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR [REDACTED]	AWARD NO. 2323102	PROPOSAL NO.		DURATION (months) Proposed Granted
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			NSF Funded Person-months CAL ACAD SUM		Funds Requested by proposer
1.					\$
2.					
3.					
4.					
5.					
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)					
7. (2) TOTAL SENIOR PERSONNEL (1-6)		0.5	0.0	0.0	11,607
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS		0.0	0.0	0.0	0
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)		0.0	0.0	0.0	0
3. (0) GRADUATE STUDENTS					0
4. (0) UNDERGRADUATE STUDENTS					0
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0
6. (0) OTHER					0
TOTAL SALARIES AND WAGES (A + B)					11,607
C. FRINGE BENIFITS (IF CHARGED AS DIRECT COSTS)					2,565
TOTAL SALARIES, WAGES AND FRINGE BENIFITS (A + B + C)					14,172
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5000.)					
1				\$	
2				\$	
3				\$	
Others: (see budget comment page ...)					\$
TOTAL EQUIPMENT					0
E. TRAVEL			1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)		0
			2. INTERNATIONAL		0
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS	\$				
2. TRAVEL					
3. SUBSISTENCE					
4. OTHER					
(0) TOTAL PARTICIPANT COSTS					0
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					0
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					0
3. CONSULTANT SERVICES					0
5. COMPUTER SERVICES					0
5. SUBAWARDS					0
6. OTHER					15,000
TOTAL OTHER DIRECT COSTS					15,000
H. TOTAL DIRECT COSTS (A THROUGH G)					29,172
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS (F&A)					20,129
J. TOTAL DIRECT AND INDIRECT COSTS (A THROUGH G)					49,301
K. FEE					
K1 RESIDUAL FUNDS					0
K2 FEE					0
L. AMOUNT OF THIS REQUEST(J) OR (J - K1 + K2)				\$	\$ 49,301
M. COST SHARING PROPOSED LEVEL \$ 0			AGREED LEVEL IF DIFFERENT \$		
PI/PD TYPED NAME & SIGNATURE*		DATE	FOR NSF USE ONLY		
			INDIRECT COST RATE VERIFICATION		
ORG. REP. TYPED NAME & SIGNATURE*		DATE	Date Checked	Date of Rate Sheet	Initials - ORG

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NATIONAL SCIENCE FOUNDATION

PROPOSAL BUDGET			FOR NSF USE ONLY		
ORGANIZATION Harvard University	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR [REDACTED]	AWARD NO. 2333466	PROPOSAL NO.		DURATION (months) Proposed Granted
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			NSF Funded Person-months CAL ACAD SUM		Funds Requested by proposer
1.					\$
2.					
3.					
4.					
5.					
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)					
7. (1) TOTAL SENIOR PERSONNEL (1-6)	0.0	0.0	0.0		0
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (0) POST DOCTORAL SCHOLARS	0.0	0.0	0.0		0
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.0	0.0	0.0		0
3. (0) GRADUATE STUDENTS					0
4. (0) UNDERGRADUATE STUDENTS					0
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0
6. (0) OTHER					0
TOTAL SALARIES AND WAGES (A + B)					0
C. FRINGE BENIFITS (IF CHARGED AS DIRECT COSTS)					0
TOTAL SALARIES, WAGES AND FRINGE BENIFITS (A + B + C)					0
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5000.)					
1				\$	
2				\$	
3				\$	
Others: (see budget comment page ...)					\$
TOTAL EQUIPMENT					0
E. TRAVEL			1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)		0
			2. INTERNATIONAL		0
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS	\$				
2. TRAVEL					
3. SUBSISTENCE					
4. OTHER					
(0) TOTAL PARTICIPANT COSTS					0
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					0
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					0
3. CONSULTANT SERVICES					0
5. COMPUTER SERVICES					0
5. SUBAWARDS					0
6. OTHER					88,740
TOTAL OTHER DIRECT COSTS					88,740
H. TOTAL DIRECT COSTS (A THROUGH G)					88,740
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS (F&A)					61,231
J. TOTAL DIRECT AND INDIRECT COSTS (A THROUGH G)					149,971
K. FEE					
K1 RESIDUAL FUNDS					0
K2 FEE					0
L. AMOUNT OF THIS REQUEST(J) OR (J - K1 + K2)				\$	\$ 149,971
M. COST SHARING PROPOSED LEVEL \$ 0			AGREED LEVEL IF DIFFERENT \$		
PI/PD TYPED NAME & SIGNATURE*		DATE	FOR NSF USE ONLY		
			INDIRECT COST RATE VERIFICATION		
ORG. REP. TYPED NAME & SIGNATURE*		DATE	Date Checked	Date of Rate Sheet	Initials - ORG

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NATIONAL SCIENCE FOUNDATION

PROPOSAL BUDGET			FOR NSF USE ONLY		
ORGANIZATION Harvard University	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR [REDACTED]	AWARD NO. 2333888	PROPOSAL NO.		DURATION (months) Proposed Granted
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			NSF Funded Person-months CAL ACAD SUM		Funds Requested by proposer
1.					\$
2.					
3.					
4.					
5.					
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)					
7. (2) TOTAL SENIOR PERSONNEL (1-6)		1.0	0.0	0.0	27,211
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (1) POST DOCTORAL SCHOLARS		12.0	0.0	0.0	67,600
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)		0.0	0.0	0.0	0
3. (0) GRADUATE STUDENTS					0
4. (1) UNDERGRADUATE STUDENTS					9,548
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0
6. (0) OTHER					0
TOTAL SALARIES AND WAGES (A + B)					104,359
C. FRINGE BENIFITS (IF CHARGED AS DIRECT COSTS)					21,112
TOTAL SALARIES, WAGES AND FRINGE BENIFITS (A + B + C)					125,471
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5000.)					
1				\$	
2				\$	
3				\$	
Others: (see budget comment page ...)					\$
TOTAL EQUIPMENT					0
E. TRAVEL			1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)		4,085
			2. INTERNATIONAL		0
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS	\$				
2. TRAVEL					
3. SUBSISTENCE					
4. OTHER					
(20) TOTAL PARTICIPANT COSTS					2,000
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					1,500
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					1,000
3. CONSULTANT SERVICES					0
5. COMPUTER SERVICES					0
5. SUBAWARDS					0
6. OTHER					1,000
TOTAL OTHER DIRECT COSTS					3,500
H. TOTAL DIRECT COSTS (A THROUGH G)					135,056
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS (F&A)					91,809
J. TOTAL DIRECT AND INDIRECT COSTS (A THROUGH G)					226,865
K. FEE					
K1 RESIDUAL FUNDS					0
K2 FEE					0
L. AMOUNT OF THIS REQUEST(J) OR (J - K1 + K2)				\$	\$ 226,865
M. COST SHARING PROPOSED LEVEL \$ 0			AGREED LEVEL IF DIFFERENT \$		
PI/PD TYPED NAME & SIGNATURE*		DATE	FOR NSF USE ONLY		
			INDIRECT COST RATE VERIFICATION		
ORG. REP. TYPED NAME & SIGNATURE*		DATE	Date Checked	Date of Rate Sheet	Initials - ORG

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NATIONAL SCIENCE FOUNDATION

PROPOSAL BUDGET			FOR NSF USE ONLY		
ORGANIZATION Harvard University	PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR [REDACTED]	AWARD NO. 2333904	PROPOSAL NO.		DURATION (months) Proposed Granted
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			NSF Funded Person-months CAL ACAD SUM		Funds Requested by proposer
1.					\$
2.					
3.					
4.					
5.					
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)					
7. (1) TOTAL SENIOR PERSONNEL (1-6)	0.5	0.0	0.0		18,853
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)					
1. (1) POST DOCTORAL SCHOLARS	6.0	0.0	0.0		33,641
2. (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	2.6	0.0	0.0		18,540
3. (0) GRADUATE STUDENTS					0
4. (0) UNDERGRADUATE STUDENTS					0
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0
6. (0) OTHER					0
TOTAL SALARIES AND WAGES (A + B)					71,034
C. FRINGE BENIFITS (IF CHARGED AS DIRECT COSTS)					13,103
TOTAL SALARIES, WAGES AND FRINGE BENIFITS (A + B + C)					84,137
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5000.)					
1				\$	
2				\$	
3				\$	
Others: (see budget comment page ...)				\$	
TOTAL EQUIPMENT					0
E. TRAVEL			1. DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)		0
			2. INTERNATIONAL		0
F. PARTICIPANT SUPPORT COSTS					
1. STIPENDS	\$				
2. TRAVEL					
3. SUBSISTENCE					
4. OTHER					
(0) TOTAL PARTICIPANT COSTS					0
G. OTHER DIRECT COSTS					
1. MATERIALS AND SUPPLIES					0
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					1,500
3. CONSULTANT SERVICES					0
5. COMPUTER SERVICES					0
5. SUBAWARDS					0
6. OTHER					0
TOTAL OTHER DIRECT COSTS					1,500
H. TOTAL DIRECT COSTS (A THROUGH G)					85,637
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)					
TOTAL INDIRECT COSTS (F&A)					59,090
J. TOTAL DIRECT AND INDIRECT COSTS (A THROUGH G)					144,727
K. FEE					
K1 RESIDUAL FUNDS					0
K2 FEE					0
L. AMOUNT OF THIS REQUEST(J) OR (J - K1 + K2)				\$	\$ 144,727
M. COST SHARING PROPOSED LEVEL \$ 0			AGREED LEVEL IF DIFFERENT \$		
PI/PD TYPED NAME & SIGNATURE*		DATE	FOR NSF USE ONLY		
			INDIRECT COST RATE VERIFICATION		
ORG. REP. TYPED NAME & SIGNATURE*		DATE	Date Checked	Date of Rate Sheet	Initials - ORG

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*SIGNATURES REQUIRED ONLY FOR REVISED BUDGET

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2116702

Managing Division Abbreviation: BCS

Amendment Number: 002

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Supplement

Amendment Date: 07/31/2024

Amendment Number: 002

Proposal Number: 2412239

Amendment Description:

The purpose of this amendment is to:

- Add supplemental support to the award in the amount shown below in the Funding Information section.
- Extend the end date from 02/28/2027 to 02/29/2028.

The Foundation authorizes the awardee to enter into the proposed subaward arrangement. The subaward agreement should contain appropriate provisions in accordance with the award terms and conditions in effect at the time of this award amendment, and contain any special conditions included in this award.

In accordance with 2 CFR 200, Appendix III, C.7, the grantee must use the negotiated rates for indirect costs (F&A) in effect at the time of the initial award throughout the life of the sponsored agreement (including any continuing grant increments and any supplemental funding awarded under the agreement.) Award levels for sponsored agreements may not be adjusted in future years as a result of changes in negotiated rates.

Except as modified by this amendment, the award conditions remain unchanged.

AWARD INFORMATION

Award Number (FAIN): 2116702

Award Instrument: Continuing Grant

Award Date: 08/04/2022**Award Period of Performance:** Start Date: 09/01/2022 End Date: 02/29/2028**Project Title:** Collaborative Research: How Events are Conceptualized by Users of Homesign and by Users of an Established Sign Language**Managing Division Abbreviation:** BCS**Research and Development Award:** Yes**Funding Opportunity:** PD 98-1311 Linguistics**Assistance Listing Number(s) and Name(s):** 47.075 Social, Behavioral, and Economic Sciences (See Amendment 000 for source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$98,620**Total Intended Award Amount:** \$545,696**Total Approved Cost Share or Matching Amount:** \$0**Total Amount Obligated to Date:** \$466,696

PROJECT PERSONNEL

Principal Investigator:

Email: [REDACTED]

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official**(Primary Contact)****Name:** Tyffani N. Smith**Email:** tnsmith@nsf.gov**Phone:** (703) 292-7046**Awarding Official****Name:** Tyffani N. Smith**Email:** tnsmith@nsf.gov**Managing Program Officer****Name:** Jorge Valdes Kroff**Email:** jvaldesk@nsf.gov**Phone:** (703) 292-7920

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at

<https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	
C. Fringe Benefits	
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	
D. Equipment	
E. Travel	
Domestic	\$0
International	\$0

F. Participant Support Costs	
Participant Support Costs	\$0
Stipends	
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$81,370
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$81,370
H. Total Direct Costs (A Through G)	\$81,370
I. Indirect Costs*	\$17,250
J. Total Direct and Indirect Costs (H + I)	\$98,620
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$98,620
M. Cost Sharing Proposed Level	\$0

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2116702

Managing Division Abbreviation: BCS

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: New Project

Amendment Date: 08/04/2022

Amendment Number: 000

Proposal Number: 2116702

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/11/2022.

Fiscal Year 2022 and 2023 budgets have been combined in this award. It is still the grantee's responsibility to submit an annual project report in accordance with the award terms and conditions.

It is the grantee's responsibility to ensure that any human subjects work conducted under this award has an Institutional Review Board (IRB) approval, where required, and that such approval remains valid at all times that human subjects work is conducted under the award. Failure to comply with this condition will result in suspension and/or termination of the award.

Incentive payments or gifts to participants must be made in accordance with written institutional policies and procedures and supported by auditable documentation. The allowability of these costs will ultimately be based on the awardee institution's ability to adequately demonstrate that the incentives have been disbursed in accordance with its policies and procedures.

Award Information

Award Number (FAIN): 2116702

Award Instrument: Continuing Grant

Award Date: 08/04/2022

Award Period of Performance: Start Date: 09/01/2022 End Date: 02/28/2026

Project Title: Collaborative Research: How Events are Conceptualized by Users of Homesign and by Users of an Established Sign Language

Managing Division Abbreviation: BCS

Research and Development Award: Yes

Funding Opportunity: PD 98-1311 Linguistics

Assistance Listing Number(s) and Name(s): 47.075 Social, Behavioral, and Economic Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$361,626

Total Intended Award Amount: \$545,696

Total Approved Cost Share or Matching Amount: \$0

Total Amount Obligated to Date: \$361,626

Expenditure Limitation: Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

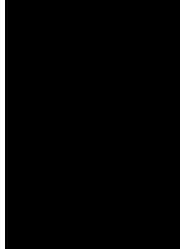
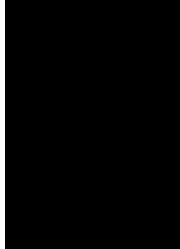
Fiscal Year	Increment Amount
2024	\$184,070

PROJECT PERSONNEL

Principal Investigator: Email:

Organization: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2116702	Y		Harvard College, President & Fellows of Harvard University
2116180	N		University of Connecticut

NSF CONTACT INFORMATION

Managing Grants

Official (Primary Contact)

Name: Tyffani N. Smith
Email: tnsmith@nsf.gov

Awarding Official

Name: Willie M. Powell
Email: wpowell@nsf.gov

Managing Program Officer

Name: William J. Badecker
Email: wbadecke@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	2.00
Senior Personnel Calendar Months	0.80
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$20,000
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	2.00
Other Professionals Calendar Months	20.35
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$109,491
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	0.00

Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	2.00
Other Amount	\$30,320
<i>Total Salaries and Wages (A+B)</i>	\$159,811
C. Fringe Benefits	\$44,929
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$204,740
D. Equipment	\$0
E. Travel	
Domestic	\$1,500
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$5,240
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$2,500
<i>Total Other Direct Costs (G)</i>	\$7,740
H. Total Direct Costs (A Through G)	\$213,980
I. Indirect Costs*	\$147,646
J. Total Direct and Indirect Costs (H + I)	\$361,626
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$361,626
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Indirect Costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2119351

Managing Division Abbreviation: DMR

Amendment Number: 000

Awardee Information

Award Recipient: Harvard College, President & Fellows of Harvard University

Awardee Address: 1033 MASSACHUSETTS AVE 5th Floor Cambridge, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (DUNS ID): 082359691

Amendment Information

Amendment Type: New Project

Amendment Date: 08/05/2021

Amendment Number: 000

Proposal Number: 2119351

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above .

Award Information

Award Number (FAIN): 2119351

Award Instrument: Standard Grant

Award Date: 08/05/2021

Award Period of Performance: Start Date: 10/01/2021 End Date: 09/30/2025

Project Title: Collaborative Research: DMREF: Design of Superionic Conductors by Tuning Lattice Dynamics

Managing Division Abbreviation: DMR

Research and Development Award: Yes

Funding Opportunity: NSF 21-522 Designing Materials to Revolutionize and Engineer our Future

CFDA Number and Name: 47.049 Mathematical and Physical Sciences

Funding Information

Amount Obligated by this Amendment: \$457,194

Total Intended Award Amount: \$457,194
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$457,194
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Institution:** Harvard University

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Institution
2119273	Y	[REDACTED]	Duke University
2118463	N	[REDACTED]	Michigan State University
2119351	N	[REDACTED]	Harvard College, President & Fellows of Harvard University
2119377	N	[REDACTED]	North Carolina State University

NSF CONTACT INFORMATION

Managing Grants

Official (Primary Contact) **Awarding Official**
Name: Elizabeth Gebremedhin **Name:** Elizabeth Gebremedhin
Email: egebreme@nsf.gov **Email:** egebreme@nsf.gov

Managing Program Officer

Name: Bryan Boudouris
Email: bboudour@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 11/12/2020, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-522 Designing Materials to Revolutionize and Engineer our Future.

BUDGET

A. Senior Personnel	
Senior Personnel Count	4.00
Senior Personnel Calendar Months	2.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$33,144
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	4.00
Graduate Students Amount	\$168,056
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$201,200

C. Fringe Benefits	\$7,689
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$208,889
D. Equipment	\$0
E. Travel	
Domestic	\$16,000
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$8,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$63,612
<i>Total Other Direct Costs (G)</i>	\$71,612
H. Total Direct Costs (A Through G)	\$296,501
I. Indirect Costs*	\$160,693
J. Total Direct and Indirect Costs (H + I)	\$457,194
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$457,194
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Indirect Costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2202984

Managing Division Abbreviation: DMS

Amendment Number: 002

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Increment

Amendment Date: 06/25/2024

Amendment Number: 002

Proposal Number: Not Applicable

Amendment Description:

The purpose of this amendment is to add incremental funding to the award in the amount shown below in the Funding Information section.

Except as modified by this amendment, the award conditions remain unchanged.

AWARD INFORMATION

Award Number (FAIN): 2202984

Award Instrument: Continuing Grant

Award Date: 04/29/2022

Award Period of Performance: Start Date: 07/01/2022 End Date: 06/30/2025

Project Title: Partially Wrapped Fukaya Categories and Functoriality in Mirror Symmetry

Managing Division Abbreviation: DMS

Research and Development Award: Yes

Funding Opportunity: PD 20-1267 Topology

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences (See Amendment 000 for source of funding for SEFA reporting)

FUNDING INFORMATION

Amount Obligated by this Amendment: \$184,572
Total Intended Award Amount: \$539,063
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$539,063

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official
(Primary Contact)
Name: Lynda Kummelt
Email: lkummelt@nsf.gov
Phone: (703) 292-7721

Awarding Official
Name: Lynda Kummelt
Email: lkummelt@nsf.gov

Managing Program Officer
Name: Swatee Naik
Email: snaik@nsf.gov
Phone: (703) 292-4876

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/20/2024, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	1.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	1.00
Senior Personnel Amount	\$33,607
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00

Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	2.00
Graduate Students Amount	\$58,676
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$92,283
C. Fringe Benefits	\$7,931
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$100,214
D. Equipment	\$0
E. Travel	
Domestic	\$4,000
International	\$4,000
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	

Materials Supplies	\$1,000
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$1,000
H. Total Direct Costs (A Through G)	\$109,214
I. Indirect Costs*	\$75,358
J. Total Direct and Indirect Costs (H + I)	\$184,572
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$184,572
M. Cost Sharing Proposed Level	\$0

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2202984

Managing Division Abbreviation: DMS

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: New Project

Amendment Date: 04/29/2022

Amendment Number: 000

Proposal Number: 2202984

Amendment Description:

The National Science Foundation hereby awards a Continuing Grant for support of the project described in the proposal referenced above as modified by revised budget dated 04/21/2022.

Award Information

Award Number (FAIN): 2202984

Award Instrument: Continuing Grant

Award Date: 04/29/2022

Award Period of Performance: Start Date: 07/01/2022 End Date: 06/30/2025

Project Title: Partially Wrapped Fukaya Categories and Functoriality in Mirror Symmetry

Managing Division Abbreviation: DMS

Research and Development Award: Yes

Funding Opportunity: PD 20-1267 Topology

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

Funding Information

Amount Obligated by this Amendment: \$174,851

Total Intended Award Amount: \$539,063

Total Approved Cost Share or Matching Amount: \$0**Total Amount Obligated to Date:** \$174,851**Expenditure Limitation:** Not Applicable

Contingent on the availability of funds and scientific progress of the project, NSF expects to continue support at approximately the following level:

Fiscal Year	Increment Amount
2023	\$179,640
2024	\$184,572

PROJECT PERSONNEL

Principal Investigator: [REDACTED]**Email:** [REDACTED]

Organization:
PRESIDENT AND
FELLOWS OF HARVARD
COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Lynda Kummelt**Email:** lkummelt@nsf.gov**Awarding Official****Name:** Aprile N Roberson**Email:** aroberso@nsf.gov**Managing Program Officer****Name:** Swatee Naik**Email:** snaik@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 10/04/2021, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel

Senior Personnel Count	1.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer	1.00

Months	
Senior Personnel Amount	\$31,678
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	2.00
Graduate Students Amount	\$55,308
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$86,986
C. Fringe Benefits	
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$94,462
D. Equipment	
Domestic	\$4,000
International	\$4,000
E. Travel	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs	\$0

Subsistence	
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$1,000
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
<i>Total Other Direct Costs (G)</i>	\$1,000
H. Total Direct Costs (A Through G)	\$103,462
I. Indirect Costs*	\$71,389
J. Total Direct and Indirect Costs (H + I)	\$174,851
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$174,851
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2203621

Managing Division

Abbreviation: CHE

Amendment Number: 002

RECIPIENT INFORMATION

Recipient (Legal Business Name): PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Recipient Address: 1033 MASSACHUSETTS AVE STE 3 CAMBRIDGE, MA 02138-5366

Official Recipient Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: Other Admin No Fund Actions

Amendment Date: 01/15/2025

Amendment Number: 002

Proposal Number: Not Applicable

Amendment Description:

The purpose of this amendment is to change the PI or co-PI in accordance with the Change PI and Add/Change Co-PI request submitted on 01/13/2025. Effective with this amendment, the project is now under the direction of [REDACTED]

Except as modified by this amendment, the award conditions remain unchanged.

PROJECT PERSONNEL

Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization:

PRESIDENT AND
FELLOWS OF
HARVARD COLLEGE

co-Principal Investigator:

[REDACTED]

Email:

[REDACTED]

Organization:

PRESIDENT AND
FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

Awarding Official

Managing Program

(Primary Contact)

Name: Pamela V. Conyers
Email: pconyers@nsf.gov
Phone: (703) 292-5329

Name: Pamela V. Conyers

Email: pconyers@nsf.gov

Officer

Name: John Michael
Papanikolas
Email:
jpapanik@nsf.gov
Phone: (703) 292-8173

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2203621

Managing Division Abbreviation: CHE

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: Renewal

Amendment Date: 07/10/2022

Amendment Number: 000

Proposal Number: 2203621

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 06/27/2022.

Award Information

Award Number (FAIN): 2203621

Award Instrument: Standard Grant

Award Date: 07/10/2022

Award Period of Performance: Start Date: 09/01/2022 End Date: 08/31/2025

Project Title: Quantum Charge Tunneling through Self-Assembled Monolayers (SAMs)

Managing Division Abbreviation: CHE

Research and Development Award: Yes

Funding Opportunity: NSF 21-589 Division of Chemistry: Disciplinary Research Programs

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

Funding Information

Amount Obligated by this Amendment: \$800,000

Total Intended Award Amount: \$800,000

Total Approved Cost Share or Matching Amount: \$0**Total Amount Obligated to Date:** \$800,000**Expenditure Limitation:** Not Applicable**PROJECT PERSONNEL****Principal Investigator:****Email:****Organization:**PRESIDENT AND
FELLOWS OF
HARVARD COLLEGE**NSF CONTACT INFORMATION****Managing Grants****Official** (Primary

Contact)

Name: Pamela V.
Conyers
Email:
pconyers@nsf.gov**Awarding Official****Name:** Elizabeth Gebremedhin
Email: egebreme@nsf.gov**Managing Program****Officer****Name:** John Michael
Papanikolas
Email: jpapanik@nsf.gov**GENERAL TERMS AND CONDITIONS**

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-589 Division of Chemistry: Disciplinary Research Programs.

BUDGET

A. Senior Personnel	
Senior Personnel Count	4.00
Senior Personnel Calendar Months	2.40
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$80,447

B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	4.00
Post Doctoral Calendar Months	48.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$229,430
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	2.00
Undergraduate Students Amount	\$12,600
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	
	\$322,477
C. Fringe Benefits	
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	
	\$399,551
D. Equipment	
Domestic	\$4,500
International	\$0
E. Travel	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0

Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$46,601
Publication Costs	\$11,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$11,720
<i>Total Other Direct Costs (G)</i>	\$69,321
H. Total Direct Costs (A Through G)	\$473,372
I. Indirect Costs*	\$326,628
J. Total Direct and Indirect Costs (H + I)	\$800,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$800,000
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MDTC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2206110

Managing Division Abbreviation: AST

Amendment Number: 000

AWARDEE INFORMATION

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

AMENDMENT INFORMATION

Amendment Type: New Project

Amendment Date: 08/17/2022

Amendment Number: 000

Proposal Number: 2206110

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/18/2022.

AWARD INFORMATION

Award Number (FAIN): 2206110

Award Instrument: Standard Grant

Award Date: 08/17/2022

Award Period of Performance: Start Date: 09/01/2022 End Date: 08/31/2025

Project Title: WoU-MMA: The Electromagnetic Counterparts of Gravitational Wave Sources

Managing Division Abbreviation: AST

Research and Development Award: Yes

Funding Opportunity: PD 18-5115 WINDOWS ON THE UNIVERSE: THE ERA OF MULTI-MESSENGER ASTROPHYSICS

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

FUNDING INFORMATION

Amount Obligated by this Amendment: \$468,687

Total Intended Award Amount: \$468,687
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$468,687
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants Official

(Primary Contact)

Name: Elizabeth

Gebremedhin

Email: egebreme@nsf.gov

Awarding Official

Name: Elizabeth Gebremedhin

Email: egebreme@nsf.gov

Managing Program Officer

Name: Hans Albert Krimm

Email: hkrimm@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	2.00
Senior Personnel Calendar Months	1.50
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$37,020
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	3.00

Post Doctoral Calendar Months	15.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$85,220
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$67,358
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$189,598
C. Fringe Benefits	\$29,742
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$219,340
D. Equipment	\$0
E. Travel	
Domestic	\$14,400
International	\$19,200
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	

Materials Supplies	\$0
Publication Costs	\$6,600
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$30,064
<i>Total Other Direct Costs (G)</i>	\$36,664
H. Total Direct Costs (A Through G)	\$289,604
I. Indirect Costs*	\$179,083
J. Total Direct and Indirect Costs (H + I)	\$468,687
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$468,687
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Modified Total Direct Costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2207119

Managing Division Abbreviation: EAR

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: New Project

Amendment Date: 07/24/2022

Amendment Number: 000

Proposal Number: 2207119

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

Award Information

Award Number (FAIN): 2207119

Award Instrument: Standard Grant

Award Date: 07/24/2022

Award Period of Performance: Start Date: 08/01/2022 End Date: 07/31/2025

Project Title: Controls on ground surface deformation in thrust and reverse fault earthquakes

Managing Division Abbreviation: EAR

Research and Development Award: Yes

Funding Opportunity: NSF 22-515 Tectonics

Assistance Listing Number(s) and Name(s): 47.050 Geosciences

Funding Information

Amount Obligated by this Amendment: \$238,111

Total Intended Award Amount: \$238,111

Total Approved Cost Share or Matching Amount: \$0**Total Amount Obligated to Date:** \$238,111**Expenditure Limitation:** Not Applicable**PROJECT PERSONNEL****Principal Investigator:** [REDACTED]**Email:** [REDACTED]**Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE**NSF CONTACT INFORMATION****Managing Grants Official**

(Primary Contact)

Name: Angela A. Turner**Email:** aturner@nsf.gov**Awarding Official****Name:** Willie M. Powell**Email:** wpowell@nsf.gov**Managing Program Officer****Name:** Audrey Huerta**Email:** ahuerta@nsf.gov**GENERAL TERMS AND CONDITIONS**

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 22-515 Tectonics.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	0.75
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$24,249
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00

Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	3.00
Other Professionals Calendar Months	4.50
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$35,583
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$63,943
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$123,775
C. Fringe Benefits	\$14,119
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$137,894
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0

Publication Costs	\$3,000
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$0
Total Other Direct Costs (G)	\$3,000
H. Total Direct Costs (A Through G)	\$140,894
I. Indirect Costs*	\$97,217
J. Total Direct and Indirect Costs (H + I)	\$238,111
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$238,111
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
Facilities and Administrative Costs	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2207659

Managing Division Abbreviation: PHY

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: Renewal

Amendment Date: 07/08/2022

Amendment Number: 000

Proposal Number: 2207659

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

Award Information

Award Number (FAIN): 2207659

Award Instrument: Standard Grant

Award Date: 07/08/2022

Award Period of Performance: Start Date: 07/15/2022 End Date: 06/30/2025

Project Title: Topics In General Relativity

Managing Division Abbreviation: PHY

Research and Development Award: Yes

Funding Opportunity: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

Funding Information

Amount Obligated by this Amendment: \$403,935

Total Intended Award Amount: \$403,935

Total Approved Cost Share or Matching Amount: \$0**Total Amount Obligated to Date:** \$403,935**Expenditure Limitation:** Not Applicable**PROJECT PERSONNEL****Principal Investigator:****Email:****Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE**NSF CONTACT INFORMATION****Managing Grants****Official** (Primary Contact)**Name:** Pamela V. Conyers**Email:** pconyers@nsf.gov**Awarding Official****Name:** Pamela V. Conyers**Email:** pconyers@nsf.gov**Managing Program Officer****Name:** Pedro Marronetti**Email:** pmarrone@nsf.gov**GENERAL TERMS AND CONDITIONS**

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects.

BUDGET

A. Senior Personnel	
Senior Personnel Count	0.00
Senior Personnel Calendar Months	0.00
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$0
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	3.00

Post Doctoral Calendar Months	18.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$115,909
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$76,793
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$192,702
C. Fringe Benefits	\$28,862
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$221,564
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$0
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	

Materials Supplies	\$0
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$29,492
<i>Total Other Direct Costs (G)</i>	\$29,492
H. Total Direct Costs (A Through G)	\$251,056
I. Indirect Costs*	\$152,879
J. Total Direct and Indirect Costs (H + I)	\$403,935
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$403,935
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2207972

Managing Division Abbreviation: PHY

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: New Project

Amendment Date: 06/24/2022

Amendment Number: 000

Proposal Number: 2207972

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 06/09/2022.

Award Information

Award Number (FAIN): 2207972

Award Instrument: Standard Grant

Award Date: 06/24/2022

Award Period of Performance: Start Date: 09/01/2022 End Date: 08/31/2025

Project Title: NSF BSF: Nonlinear Photon Interactions in Cooperative Quantum Optical Systems

Managing Division Abbreviation: PHY

Research and Development Award: Yes

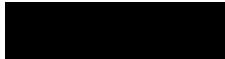
Funding Opportunity: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences

Funding Information

Amount Obligated by this Amendment: \$300,000

Total Intended Award Amount: \$300,000

Total Approved Cost Share or Matching Amount: \$0**Total Amount Obligated to Date: \$300,000****Expenditure Limitation:** Not Applicable**PROJECT PERSONNEL****Principal Investigator:****Email:****Organization:** PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE**NSF CONTACT INFORMATION****Managing Grants Official**

(Primary Contact)

Name: Pamela V. Conyers**Email:** pconyers@nsf.gov**Awarding Official****Name:** Elizabeth Gebremedhin**Email:** egebreme@nsf.gov**Managing Program Officer****Name:** Robert Forrey**Email:** rforrey@nsf.gov**GENERAL TERMS AND CONDITIONS**

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-593 Division of Physics: Investigator-Initiated Research Projects.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	1.50
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$33,552
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	3.00

Post Doctoral Calendar Months	7.50
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$41,418
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$60,333
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$135,303
C. Fringe Benefits	\$17,894
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$153,197
D. Equipment	\$0
E. Travel	
Domestic	\$0
International	\$6,000
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	

Materials Supplies	\$2,327
Publication Costs	\$0
Consultant Services	\$0
Computer Services	\$0
Subawards	\$0
Other	\$27,024
<i>Total Other Direct Costs (G)</i>	\$29,351
H. Total Direct Costs (A Through G)	\$188,548
I. Indirect Costs*	\$111,452
J. Total Direct and Indirect Costs (H + I)	\$300,000
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$300,000
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC Basis	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2209623

Managing Division Abbreviation: OAC

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: New Project

Amendment Date: 08/18/2022

Amendment Number: 000

Proposal Number: 2209623

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above as modified by revised budget dated 07/18/2022.

Award Information

Award Number (FAIN): 2209623

Award Instrument: Standard Grant

Award Date: 08/18/2022

Award Period of Performance: Start Date: 09/01/2022 End Date: 08/31/2025

Project Title: Collaborative Research: Elements: Enriching Scholarly Communication with Augmented Reality

Managing Division Abbreviation: OAC

Research and Development Award: Yes

Funding Opportunity: NSF 21-617 Cyberinfrastructure for Sustained Scientific Innovation

Assistance Listing Number(s) and Name(s): 47.049 Mathematical and Physical Sciences, 47.070 Computer and Information Science and Engineering

Funding Information

Amount Obligated by this Amendment: \$402,107
Total Intended Award Amount: \$402,107
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$402,107
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator: [REDACTED] **Email:** [REDACTED] **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE

COLLABORATIVE INFORMATION

Proposal ID	Lead	PI Name	Organization
2209623	Y	[REDACTED]	Harvard College, President & Fellows of Harvard University
2209624	N	[REDACTED]	Northeastern University
2209625	N	[REDACTED]	The Johns Hopkins University

NSF CONTACT INFORMATION

Managing Grants

Official (Primary

Contact)

Name: Daniel P
McEnrue
Email:
dpmcenru@nsf.gov

Awarding Official

Name: Jannele L. Gosey
Email: jgosey@nsf.gov

Managing Program Officer

Name: Varun Chandola
Email: vchandol@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-617
Cyberinfrastructure for Sustained Scientific Innovation.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	2.24
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$65,701
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	3.00
Other Professionals Calendar Months	0.06
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$6,232
Graduate Students	
Graduate Students Count	0.00
Graduate Students Amount	\$0
Undergraduate Students	
Undergraduate Students Count	3.00
Undergraduate Students Amount	\$12,298
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	\$84,231

C. Fringe Benefits	\$17,936
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	\$102,167
D. Equipment	\$0
E. Travel	
Domestic	\$11,936
International	\$14,920
F. Participant Support Costs	
Participant Support Costs Stipends	\$0
Participant Support Costs Travel	\$0
Participant Support Costs Subsistence	\$0
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$2,486
Publication Costs	\$11,936
Consultant Services	\$89,514
Computer Services	\$0
Subawards	\$0
Other	\$4,974
<i>Total Other Direct Costs (G)</i>	\$108,910
H. Total Direct Costs (A Through G)	\$237,933
I. Indirect Costs*	\$164,174
J. Total Direct and Indirect Costs (H + I)	\$402,107
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$402,107
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2210173

Managing Division Abbreviation: OPP

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: New Project

Amendment Date: 07/07/2022

Amendment Number: 000

Proposal Number: 2210173

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

Award Information

Award Number (FAIN): 2210173

Award Instrument: Standard Grant

Award Date: 07/07/2022

Award Period of Performance: Start Date: 08/01/2022 End Date: 07/31/2025

Project Title: Collaborative Research: Impacts of Global Change on Terrestrial Mercury in the Arctic

Managing Division Abbreviation: OPP

Research and Development Award: Yes

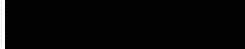
Funding Opportunity: NSF 21-526 Arctic Research Opportunities

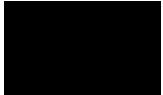
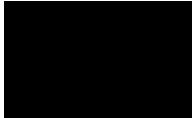
Assistance Listing Number(s) and Name(s): 47.078 Polar Programs

Funding Information

Amount Obligated by this Amendment: \$578,882

Total Intended Award Amount: \$578,882

Total Approved Cost Share or Matching Amount: \$0**Total Amount Obligated to Date:** \$578,882**Expenditure Limitation:** Not Applicable**PROJECT PERSONNEL****Principal Investigator:**  **Email:** **Organization:** PRESIDENT AND FELLOWS OF HARVARD COLLEGE**COLLABORATIVE INFORMATION**

Proposal ID	Lead	PI Name	Organization
2210172	Y		University of Colorado
2210173	N		Harvard College, President & Fellows of Harvard University

NSF CONTACT INFORMATION**Managing Grants****Official** (Primary Contact)**Name:** Angela A. Turner
Email: aturner@nsf.gov**Awarding Official****Name:** Willie M. Powell
Email: wpowell@nsf.gov**Managing Program Officer****Name:** Kelly McCarrick Brunt
Email: kbrunt@nsf.gov**GENERAL TERMS AND CONDITIONS**

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

This award is made in accordance with the provisions of NSF Solicitation: NSF 21-526 Arctic Research Opportunities.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	1.50
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$35,270
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	0.00
Post Doctoral Calendar Months	0.00
Post Doctoral Academic Months	0.00
Post Doctoral Summer Months	0.00
Post Doctoral Amount	\$0
Other Professionals	
Other Professionals Count	0.00
Other Professionals Calendar Months	0.00
Other Professionals Academic Months	0.00
Other Professionals Summer Months	0.00
Other Professionals Amount	\$0
Graduate Students	
Graduate Students Count	3.00
Graduate Students Amount	\$127,576
Undergraduate Students	
Undergraduate Students Count	0.00
Undergraduate Students Amount	\$0
Secretarial - Clerical	
Secretarial - Clerical Count	0.00
Secretarial - Clerical Amount	\$0
Other	
Other Count	0.00
Other Amount	\$0
<i>Total Salaries and Wages (A+B)</i>	
	\$162,846
C. Fringe Benefits	
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	
	\$8,324
<i>Total Salaries, Wages, Fringe Benefits (A + B + C)</i>	
	\$171,170
D. Equipment	
E. Travel	
Domestic	\$13,500

International	\$0
F. Participant Support Costs	
Participant Support Costs	\$0
Stipends	
Participant Support Costs	\$0
Travel	
Participant Support Costs	\$0
Subsistence	
Participant Support Costs Other	\$0
Total Number of Participants	0.00
<i>Total Participant Costs (F)</i>	\$0
G. Other Direct Costs	
Materials Supplies	\$0
Publication Costs	\$4,500
Consultant Services	\$124,462
Computer Services	\$0
Subawards	\$0
Other	\$48,844
<i>Total Other Direct Costs (G)</i>	\$177,806
H. Total Direct Costs (A Through G)	\$362,476
I. Indirect Costs*	\$216,406
J. Total Direct and Indirect Costs (H + I)	\$578,882
K. Fees	\$0
L. Total Amount of Request (J) OR (J + K)	\$578,882
M. Cost Sharing Proposed Level	\$0

*Indirect Cost Rates

Item Name	Indirect Cost Rate
MTDC	69.0000%

These rates are at the time of award and are based upon the budget submitted to the NSF. It does not include any out-year adjustments. The NSF will not modify awards simply to correct indirect cost rates cited in the award notice. See the Proposal & Award Policies & Procedures Guide (PAPPG) Chapter X.A.3.a. for guidance on re-budgeting authority.

NATIONAL SCIENCE FOUNDATION

Award Notice

Award Number (FAIN): 2210757

Managing Division Abbreviation: AGS

Amendment Number: 000

Awardee Information

Award Recipient: PRESIDENT AND FELLOWS OF HARVARD COLLEGE

Awardee Address: 1033 MASSACHUSETTS AVE 5TH FL CAMBRIDGE, MA 02138-5369

Official Awardee Email Address: [REDACTED]

Unique Entity Identifier (UEI): LN53LCFJFL45

Amendment Information

Amendment Type: New Project

Amendment Date: 06/05/2022

Amendment Number: 000

Proposal Number: 2210757

Amendment Description:

The National Science Foundation hereby awards a Standard Grant for support of the project described in the proposal referenced above.

Award Information

Award Number (FAIN): 2210757

Award Instrument: Standard Grant

Award Date: 06/05/2022

Award Period of Performance: Start Date: 07/01/2022 End Date: 06/30/2025

Project Title: Using Hothouse Climates to Generalize Understanding of Convection, Clouds, and Circulation

Managing Division Abbreviation: AGS

Research and Development Award: Yes

Funding Opportunity: PD 06-5740 Climate and Large-Scale Dynamics

Assistance Listing Number(s) and Name(s): 47.050 Geosciences

Funding Information

Amount Obligated by this Amendment: \$396,217

Total Intended Award Amount: \$396,217
Total Approved Cost Share or Matching Amount: \$0
Total Amount Obligated to Date: \$396,217
Expenditure Limitation: Not Applicable

PROJECT PERSONNEL

Principal Investigator:

Email:

Organization: PRESIDENT
AND FELLOWS OF
HARVARD COLLEGE

NSF CONTACT INFORMATION

Managing Grants

Official (Primary Contact)
Name: Meredith Whitty
Email: mwhitty@nsf.gov

Awarding Official

Name: Willie M. Powell
Email: wpowell@nsf.gov

Managing Program Officer

Name: Varavut Limpasuvan
Email: vlimpasu@nsf.gov

GENERAL TERMS AND CONDITIONS

This is awarded pursuant to the authority of the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75) and is subject to Research Terms and Conditions (RTCs) dated 11/12/2020, and NSF Agency Specific Requirements, dated 05/13/2022, available at <https://www.nsf.gov/awards/managing/rtc.jsp>.

This institution is a signatory to the Federal Demonstration Partnership (FDP) Phase VI Agreement which requires active institutional participation in new or ongoing FDP demonstrations and pilots.

BUDGET

A. Senior Personnel	
Senior Personnel Count	3.00
Senior Personnel Calendar Months	1.50
Senior Personnel Academic Months	0.00
Senior Personnel Summer Months	0.00
Senior Personnel Amount	\$33,484
B. Other Personnel	
Post Doctoral Scholars	
Post Doctoral Count	3.00
Post Doctoral Calendar Months	24.00